

A B S T R A C T

Two coil forming elements (12, 14) formed of conductor layers and a contact means (19), which is formed in an interlayer dielectric film (13) interposed between the conductor layers and brings the upper and
5 lower coil forming elements into contact with each other through a via hole form a stacked coil (10). One end of the stacked coil is connected to an upper grounding layer (27) of a strip line (20), and the other end of the stacked coil is connected to a strip conductor (23)
10 of the strip line. The number of turns of the stacked coil is larger than 1. A magnetic flux penetrating through the stacked coil increases to be able to induce a relatively large electromotive force. Thus, a high spatial resolution can be obtained easily.